

**IN THE CLAIMS**

The following listing of the claims is provided in accordance with 37 C.F.R. §1.121:

1. (previously presented) A communications network, comprising:  
at least one source unit configured to generate messages for relay;  
a smart node capable of storing programming instructions, receiving messages for relay from said source unit, determining at least a merit value for said received messages, dynamically reprioritizing the received messages for relay based upon said merit value, and transmitting the reprioritized received messages; and  
at least one portal node adapted to receive said reprioritized received messages transmitted from said smart node.
2. (previously presented) The communications network as specified in claim 1, wherein said smart node comprises an electronic computer for executing said programming instructions.
3. (previously presented) The communications network of claim 1, wherein said programming instructions comprise active messages.
4. (previously presented) A communications network, comprising:  
at least one source unit configured to generate messages for relay;  
a smart node capable of receiving programming instructions, storing said programming instructions, receiving messages for relay from said source unit, storing the received messages for relay in a queue, determining at least a merit value for said received messages, and dynamically reprioritizing the received messages for relay in said queue based upon said merit value;

at least one portal node adapted to receive said retransmitted received messages from said at least one smart node for relay; and

at least one communications node adapted to send said programming instructions to said smart node.

5. (currently amended) The communications network of claim 4 [14], wherein said smart node comprises:

a message storage queue;

a transmitter;

a receiver;

a queue controller for writing messages received at said smart node into said message storage queue and for removing messages from said message storage queue for relay transmission by said transmitter; and

a dynamic reprioritization controller for specifying an order of transmission of said removed messages for relay transmission by said transmitter.

6. (previously presented) The communications network of claim 5, including at least one receiver for receiving said messages for relay from said source unit.

7. (currently amended) The communications network of claim 4 [1], wherein said merit value for said received messages is determined heuristically.

8. (previously presented) The communications network of claim 4, wherein said merit value for said received messages is determined heuristically.

9. (previously presented) A method for dynamic reprioritizing messages, comprising:

receiving messages from a source unit;

storing said received messages in a buffer unit;

determining a merit value for said received messages;  
reprioritizing said received messages based upon said merit value; and  
transmitting the reprioritized received messages.

10. (currently amended) The method of claim 9, wherein said merit value for said received messages is ~~may be~~ determined heuristically.

11. (previously presented) The method of claim 9, wherein said received messages are stored in a queue.

12. (previously presented) The method of claim 9, wherein a smart node reprioritizes said received messages.

13. (previously presented) The method of claim 12, wherein said smart node transmits said reprioritized received messages.

14. (previously presented) The method of claim 12, wherein said smart node receives programmable instructions from a communication node.